

FOR NATIONAL PHASE SUBMISSION

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CLAIM AMENDMENTS

WHAT IS CLAIMED IS:

This listing of the claims will replace all prior versions, and listing, of claims in the application:

1. (Currently Amended) ~~High~~ A high pressure radial piston pump for common rail injection systems ~~with~~ comprising:

- a pump housing ~~(1)~~,
- a drive shaft ~~(2)~~,
- at least one pump piston ~~(3)~~, which can move in a radial direction in relation to the drive shaft ~~(2)~~ and
- a high pressure accumulator ~~(4)~~ integrated into the high pressure radial piston pump,

~~characterized in that~~ wherein

the high pressure accumulator ~~(4)~~ is embodied in the form of a ring.

2. (Currently Amended) ~~High~~ A high pressure radial piston pump according to claim 1, wherein

~~characterized in that~~

the high pressure accumulator ~~(4)~~ is arranged concentric in relation to the drive shaft ~~(2)~~.

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3. (Currently Amended) A high pressure radial piston pump according to claim 1, wherein~~High pressure radial piston pump according to claim 1 or 2~~

~~characterized in that~~

the high pressure accumulator~~(4)~~ is formed by a ring groove realized in the pump housing~~(1)~~ at the front side and sealed with a cover~~(5)~~.

4. (Currently Amended) A high pressure radial piston pump according to claim 3, wherein~~High pressure radial piston pump according to claim 3~~

~~characterized in that~~

at least one metallic sealing surface~~(6, 7)~~ is formed on the pump housing~~(1)~~ and/or on the cover~~(5)~~ in order to seal the high pressure accumulator~~(4)~~.

5. (Currently Amended) A high pressure radial piston pump according to claim 3, wherein~~High pressure radial piston pump according to claim 3 or 4~~

~~characterized in that~~

the cover~~(5)~~ is connected to the pump housing~~(1)~~ at least by means of one central screw~~(8)~~ arranged concentric in relation to the ring groove.

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6. (Currently Amended) A high pressure radial piston pump according to claim 1, wherein~~High pressure radial piston pump according to claim 1 or 2~~

~~characterized in that~~

the high pressure accumulator~~(4)~~ is embodied as a ring groove which is realized in the outer circumference~~(9)~~ of a rotationally symmetrical pump insert~~(10)~~.

7. (Currently Amended) A high pressure radial piston pump according to claim 6, wherein~~High pressure radial piston pump according to claim 6~~

~~characterized in that~~

the outer circumference~~(9)~~ of the pump insert~~(10)~~ operates together with a corresponding inner circumference surface~~(11)~~ of the pump housing~~(1)~~.

8. (Currently Amended) A high pressure radial piston pump according to claim 6, wherein~~High pressure radial piston pump according to claim 6 or 7~~

~~characterized in that~~

the pump insert~~(10)~~ is embodied in cylindrical form.

9. (Currently Amended) A high pressure radial piston pump according to claim 1, comprising~~High pressure radial piston pump according to one of the previous claims,~~

~~characterized in that~~

~~there is~~ at least one high pressure connection~~(12)~~ embodied on the high pressure accumulator~~(4)~~ in order to supply at least one injector of an internal combustion engine.

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10. (Currently Amended) A high pressure radial piston pump according to claim 1, wherein~~High pressure radial piston pump according to one of the previous claims,~~
~~characterized in that~~

the high pressure accumulator~~(4)~~ is effectively connected with a pressure control valve integrated into the high pressure radial piston pump or arranged on the high pressure radial piston pump.

11. (NEW) A high pressure radial piston pump for common rail injection systems comprising:

- a pump housing,
- a drive shaft,
- at least one pump piston, which can move in a radial direction in relation to the drive shaft and
- a ring shaped high pressure accumulator integrated into the high pressure radial piston pump.

12. (NEW) A high pressure radial piston pump according to claim 11, wherein

the ring shaped high pressure accumulator is arranged concentric in relation to the drive shaft.

13. (NEW) A high pressure radial piston pump according to claim 11, wherein

the ring shaped high pressure accumulator is formed by a ring groove realized in the pump housing at the front side and sealed with a cover.

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14. (NEW) A high pressure radial piston pump according to claim 13, wherein

at least one metallic sealing surface is formed on the pump housing and/or on the cover in order to seal the ring shaped high pressure accumulator.

15. (NEW) A high pressure radial piston pump according to claim 13, wherein

the cover is connected to the pump housing at least by means of one central screw arranged concentric in relation to the ring groove.

16. (NEW) A high pressure radial piston pump according to claim 11, wherein

the ring shaped high pressure accumulator is embodied as a ring groove which is realized in the outer circumference of a rotationally symmetrical pump insert.

17. (NEW) A high pressure radial piston pump according to claim 16, wherein

the outer circumference of the pump insert operates together with a corresponding inner circumference surface of the pump housing.

18. (NEW) A high pressure radial piston pump according to claim 16, wherein

the pump insert is embodied in cylindrical form.

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19. (NEW) A high pressure radial piston pump according to claim 11, comprising

at least one high pressure connection embodied on the ring shaped high pressure accumulator in order to supply at least one injector of an internal combustion engine.

20. (NEW) A high pressure radial piston pump according to claim 11, wherein

the ring shaped high pressure accumulator is effectively connected with a pressure control valve integrated into the high pressure radial piston pump or arranged on the high pressure radial piston pump.